## REMARKS

Claim 1 has been amended to more specifically set forth the invention. Claims 13-19 have been allowed. Claims 20-23 have been canceled without prejudice to the subsequent filing of a continuation or divisional application. New claims 24-28 have been added to provide better coverage for the invention. Reconsideration is respectfully requested.

### Election/Restriction

Affirmation of the election to prosecute Group I, claims 1-19 is hereby confirmed. Claims 20-23 have been canceled without prejudice to confirm the election and are hereby reserved for the subsequent filing of a continuation or divisional application.

### Allowed Claims

Claims 13-19 have been allowed and will not be discussed further.

### 35 U.S.C. §103(a) rejections

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer et al. (U.S.P. 6,460,405).

Applicant believes that the amendments to claim 1 overcome this rejection.

Mayer et al. disclose apparatus for testing gas leakage of sealed medical packages 10 having a tray 11 and a gas-permeable sheet or membrane 18 (Col. 3, lines 45-49). As can be seen in FIG. 2 and understood from the description, the package is placed in the chamber 24 so that permeable membrane 18 is sealed except for openings 89 and 90 in communication with a tracer gas source 60 and an exhaust device 50. A carrier gas from source 28 is then used to carry any tracer gas that leaks from the package to a detector 34.

Several features of this structure should be specifically noted. First, leakage of the package is being tested and not permeability of the package. Leakage is the result of holes in the package whereas permeation refers to dissolution of the permeant in the packaging materials and molecular diffusion through the material. Second, only one package can be tested at a time, since the permeable sheet of the package must be sealed except for openings 89 and 90 which must be in communication with tracer gas source 60 and exhaust device 50. Third, tracer gas flows continuously (col. 4, lines 34-35) and carrier gas flows through chamber

24 to carry leaked tracer gas to detector 34. From these features and others it is clear that the structure of Mayer et al. is not similar to applicant's structure and neither operates in a similar fashion nor could operate in a similar fashion.

Applicant's novel invention is designed to measure permeability of packages. To this end, applicant's structure includes "a housing defining an inner sealed chamber with an internal volume large enough to receive a plurality of packages to be tested". When testing packages for permeability it is a substantial advantage to be able to test more than one package at a time. As applicant clearly explained in his specification, page 14, lines 30-31, "Indeed, it is preferable to use as many test samples or packages as possible to shorten the test time." Clearly, the structure of Mayer et al. can not provide this substantial advantage.

Also, claim 1 specifies "a sensor positioned within the sealed chamber and designed to provide signals, external of the chamber, indicative of permeant concentrations within the chamber". This specific construction provides a substantial advantage over prior art testing devices that use a carrier gas to carry samples to a detector. As applicant states in the specification, at page 4, lines 11-18, "The concentration of permeated permeant is often extremely small in the second chamber, especially when the sample material is a good barrier. Measuring such low concentrations of the permeants reliably is a challenge for most sensors. Furthermore, such low permeant concentrations are diluted several fold when a carrier gas is used to transport the permeated permeant to the remote detector." Clearly, Mayer et al. discloses the type of device that uses a carrier gas to carry material to be tested to the detector and, thereby, substantially dilutes the material to be tested. The functionality of applicant's sensor and the Mayer et al. sensor are not equivalent. Thus, the position of applicant's sensor provides substantial advantage over the sensor of Mayer et al.

Further, claim 1 now specifies that the apparatus has a flushing mode and a testing mode and "the inlet valve and the outlet valve being in the inlet opening mode and the outlet opening mode, respectively, in the apparatus flushing mode, the inlet valve and the outlet valve being in the inlet closing mode and the outlet closing mode, respectively, and the sealed chamber being filled with the inert medium in the apparatus testing mode". This is not functional language but actually specifies structure. Since the structure of Mayer et al. does not include structure of the type specifically included in claim 1, it is clear that claim 1 is not obvious in view of Mayer et al.

Claims 2-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer et al. (U.S.P. 6,460,405) as applied to claim 1 above, and further in view of Tou et al. (U.S.P. 4,944,180). Applicant believes that the amendments to claim 1 also overcome this rejection.

It must be specifically noted that Mayer et al. do not measure permeability, they only measure leakage of a specific type of sealed medical package. Further, the mere fact that Tou et al. disclose apparatus for measuring permeation does not in any way teach one skilled in the art to modify the Mayer et al. device so it can measure permeability. There is a substantial difference between gas leaking through holes in a package (Mayer et al. specification, col. 1, lines 43-53) and gas permeating through the material of the package. As to whether the Mayer et al. device could be modified to include temperature and humidity sensors/controls from the disclosure of Tou et al., applicant is doubtful since it would require such substantial changes. However, since the Mayer et al. apparatus cannot be modified, using the Tou et al. teaching or otherwise, to provide the claimed structure, applicant believes this argument is moot.

Also, the Tou et al. structure and teaching has all of the deficiencies mentioned above relative to Mayer et al. For example, the Tou et al. structure can only test one film at a time, the Tou et al. device uses a flow of gas to carry particles to be sensed to a detector, and the Tou et al. structure does not have two modes of operation similar to applicant's claimed structure. Thus, no combination of Mayer et al. and Tou et al. can be suggested to provide the structure claimed by applicant and claims 2-11 are not obvious in view of Mayer et al. and/or Tou et al. alone or in any proper combination.

Claims 2-4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer et al. (U.S.P. 6,460,405) as applied to claim 1 above, and further in view of Retta et al. (U.S.P. 5,138,871). Applicant believes that the amendments to claim 1 also overcome this rejection.

As stated above, Mayer et al. do not measure permeability, they only measure leakage of a specific type of sealed medical package. Further, the mere fact that Retta et al. disclose apparatus for measuring permeation does not in any way teach one skilled in the art to modify the Mayer et al. device so it can measure permeability. There is a substantial difference between gas leaking through holes in a package (Mayer et al. specification, col. 1, lines 43-53) and gas permeating through the material of the package. As to whether the Mayer et al. device could be modified to include agitation apparatus from the disclosure of Retta et al., applicant is doubtful since it would require such substantial changes. However, since the Mayer et al. apparatus cannot be modified, using the Tou et al. teaching or otherwise, to provide the claimed structure, applicant believes this argument is moot. Thus, no combination of Mayer et al. and Retta et al. can be suggested to provide the structure claimed by applicant and claims 2-4 and 12 are not obvious in view of Mayer et al. and/or Retta et al. alone or in any proper combination.

## New Claims

New claims 24-27 are dependent on allowed claim 13 and are, therefore, believed to be allowable.

New claim 28 is an independent claim that specifies a housing "containing a plurality of packages to be measured for permeability and/or permeant sorption, each package of the plurality of packages containing a material with a permeant of interest". Clearly none of the cited references disclose structure that is capable of receiving a plurality of packages. Further, none of the cited references are capable of receiving packages that contain a material with a permeant of interest nor do any of the cited references disclose apparatus that could measure the permeability of those packages. Therefore, applicant believes that claim 28 is allowable over any of the cited references.

## SUMMARY

In view of the foregoing, it is submitted that each of the claims is in condition for allowance. Withdrawal of the rejections and allowance of the claims is respectfully requested. Should there be any questions or remaining issues, Examiner is cordially invited to telephone the undersigned attorney for a speedy resolution.

Respectfully requested,

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